STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION
2101 WEBSTER STREET, SUITE 500
OAKLAND, CA 94612

TEL: (510) 286-1255
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December 27, 1993
File No. 1114.17(SIM)

Philip J. Armstrong, Project Officer
U.S. Environmental Protection Agency, Region IX
Hazardous Waste Division (H-8-1)
75 Hawthorne Street
San Francisco, CA 94105

Dear Mr. Armstrong:

Subject: **Quarterly Progress Report for the South Bay MSCA**
Fiscal Year 93 for the Quarter 1 July - 30 September 1993

Attached are two copies of the Quarterly Progress Report. The report covers the tasks in the approved Workplan amendments within the grant amendment award of July 30, 1993. As explained previously, the report is late due to the press of other business. I don't believe there are any significant changes from the project status report as discussed with you and Kelly McCarty in October.

As before, I would appreciate any constructive comments you may have to assure compliance of and/or improve the usefulness of the report. Please call me (510/286-0304) if you have any questions.

Sincerely,

Steve Morse

Steve Morse
MSCA Program Manager

Attachment: Quarterly Progress Report (2)
cc: SRR, LPK, LKB, BHW, SAH, GW
J. Tarro [SWRCB/DAS(Budgets)]
A. Lincoff, EPA (H-6-3)

QUARTERLY STATUS REPORT

July - September 1993

SOUTH BAY MULTI-SITE COOPERATIVE AGREEMENT (MSCA)

EPA GRANT NUMBER V-009403-02-A(10)
(as of July 30, 1993)

State Water Resources Control Board

California Regional Water Quality Control Board
San Francisco Bay Region
South Bay Toxics Cleanup Division

November 15, 1993

The goals of the MSCA for this phase are:

To accelerate cleanup at Superfund sites in the South Bay.

To augment the RWQCB's existing programs to ensure that the EPA's requirements, as defined in the National Contingency Plan (NCP), are met for those NPL sites assigned to the RWQCB as lead agency.

* * *

The South Bay Multi-Site Cooperative Agreement (MSCA), Phase II, was awarded and accepted by the State Water Resources Control Board effective April 13, 1988. This progress report for this phase is submitted to satisfy the Special Conditions. This report covers the July - September 1993 quarter as amended in subsequent grant offers, the latest being awarded July 30, 1993, to extend the agreement to December 31, 1993, with partial awards of June 1992 and July 1993.

The MSCA Grant provides funding for activities of the state (i.e. State Board and Regional Board) responsible for coordinating and enforcing groundwater cleanup programs at Federal Superfund sites in the South Bay. The estimated expenditures, staff years, and accomplishments are compared to the work plans of January 28, 1988, March 9, 1989, February 13, 1990, January 1991, and January 22, 1992 (with revisions and reductions per Regional Board workplan amendments of May 3, 1993).

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QUARTERLY PROGRESS REPORT
SOUTH BAY MULTI-SITE COOPERATIVE AGREEMENT
July - September 1993

II - SPECIAL CONDITIONS

Besides the tasks in the MSCA's Workplan, some of the grant's Special Conditions require the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Board (RWQCB) to perform certain activities. The Revised Special Conditions responded to here are part of the grant offer of June 5, 1992.

An amended Workplan for 1992-1993 for $2.35 million was submitted to and approved by the EPA with a partial award June 5, 1992. A recent award, dated July 30, 1993, was accepted by the State. Its acceptance does not materially change the direction of the Board's efforts for the quarter and next 6 months.

Under the terms of the Special Conditions, the Board requested that EPA redirect funds between several of the sites to cover unanticipated costs not budgeted. EPA has agreed to the redirection and included the redirection in the 1992-1993 grant award. Because the award was later than anticipated, and additional agreed upon work was also needed (and not needed) at some sites, redirection will be needed again.

Due to a change in State accounting to allocate all non-site specific charges monthly (to the appropriate NPL sites in proportion to staff activity), the grant workplan non-site specific tasks (A, B, and E.3.) and their accounting records can be misinterpreted. The budget and expenditures shown for this quarterly review are the *total for all sites.*

EPA continues to finalize the few remaining MSCA sites for initial demands for cost-recovery started in early March 1992. EPA has to date received significant and substantial payments. It is expected that requests for additional annual cost-recovery payments will be made early next year.

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III - SUMMARY AND STATUS OF MSCA TASKS AND BUDGETS

This Section provides a summary as well as details where necessary on the quarterly progress and status of the MSCA tasks in the Workplan of January 1992 and as approved via the July 1993 grant award.

To accelerate the cleanup at the South Bay Federal Superfund sites the EPA assigned the responsibility along with the necessary augmented funding to the State and Regional Boards to accomplish oversight and regulation of the South Bay Superfund sites under Federal and State law, regulations and EPA Guidelines.

In all instances the acute toxics threat and risk at the MSCA sites is now either under interim control (awaiting long-term solutions) due to aggressive earlier Board regulation and requirements for initial and interim investigations, removals, and remediation or the Board and EPA have adopted and the Responsible Parties are (or have) constructed and/or implemented the long-term remediation project to control chronic threats. The Regional Board's efforts are now focused primarily on the remaining sites requiring completion of any necessary investigations and development of cleanup alternatives (i.e. the RI/FS process) and a proposed cleanup plan (the RAP) for public review and comment (See Table, page III-5). After public review and comment, the Board will adopt the RAP in a Site Cleanup Order (i.e. CAO) as modified by public comment, staff recommendations and Board guidance. If EPA approves of the Board's actions and selects the same remedy (RAP), they will administratively adopt a Record of Decision (ROD). Close coordination with EPA is maintained during the process; there is no reason to believe that EPA would not choose the same remedy as the Board.

Significant Events and Activities During the Grant Quarter:

South Bay MSCA Superfund Site Cleanup Decisions (RI/FS/RAP): All the South Bay Superfund sites have accomplished significant amounts of work to meet Superfund final cleanup decision requirements. The tasks remaining are necessary to meet State and Federal Superfund (all of which the State requires as well) requirements to determine the best alternative considering protection of public health and the environment as well as the maintenance (i.e. high quality groundwater) and protection of the resource (i.e. water conservation and reclamation).

Official Board Actions:

July: Hexcel -- initial hearing on RAP
MS/Intel Mag -- amend SCR (continued)
August: HP 1501 -- amend time schedule
September: Hexcel -- adopt final RAP

Other MSCA Events/Activities during the Quarter:

Quarterly Enforcement Meeting: Although EPA and the Board project staff met frequently during the quarter, no joint quarterly meeting was held between Cal/EPA DTSC, EPA, and the Board covering the enforcement status of the South Bay toxics cleanup sites -- either Superfund or non-Superfund. This joint meeting was previously formalized in the updated South Bay Enforcement Agreement. At this time the primary area where the three agencies interface is the Stanford Industrial Park area in Palo Alto, Rhône-Poulenc in East Palo Alto where the DTSC was previously the lead agency, and at United Heckathorn and Liquid Gold sites in Richmond where the Board is a support agency.

South Bay Groundwater Task Force: Due to low public attendance and interest, future meetings have been canceled unless a specific topic or site arises that warrants reconstitution of the task force. Contact with the usual participants of the Task Force is maintained through individual site-specific contacts.

Board staffing: During the quarter, the Board's staffing in support of the MSCA was satisfactory. Support of an Information System Technician (IST) is provided on an "as needed" basis from another division within the RWQCB. Because of the absence of the IST for most of last year, the production of the Site Management System (SMS) has been suspended with anticipated restart date to be early 1994. In concert with an effort to reduce the amount of resources necessary in producing the Site Management System, the transfer of the Information System Technician did not significantly affect Site Management System (the published SMS has not been updated since early 1992). It is expected to resume the SMS through the use of an annual update (early 1994) and followups via a computer Bulletin Board System, now on-line as of March.

State budget shortfalls did not affect the MSCA staffing, but may affect purchasing timeliness.

1992-1993 MSCA Workplan: The Regional Board submitted the amended 1992-1993 MSCA Workplan in January 1992; the State Board accepted and applied for the amended grant in March 1992; and the EPA awarded the amended Grant in June 1992. The Workplan is effective through September 30, 1993. Revision to the current workplan (reduced budget) and expiration (increased time to December 31, 1993) have been agreed to by EPA (July 30, 1993) and acccepted by the SWRCB as of mid August.

EPA Cost-Recovery: In early March 1992, EPA began the process of cost-recovery for the MSCA sites. The demands are for combined costs of the Board (through June 30, 1991) and EPA (through July 31, 1991). By the end of March 1992, several RPs had already paid, and most of the remaining billed sites have paid either in full or partially. A cost-recovery suit has been filed by EPA against Intel, Kim Camp III, CTS Printex, and ADN. Completion of the initial cost-recovery cycle is expected soon and the beginning of a new annual cycle is expected to begin early next year. SWRCB is preparing site accounting records as necessary.

Status and Funding of MSCA Tasks:

The overall status of the Grant tasks is satisfactory, especially with the new grant supplemental award received July 30, 1993. Even after the July 30 award, some redirection of grant funds may still be needed between sites due to work necessary (and not necessary) that was not anticipated in the 1993 submittal for an amended award. The overall expenditures do not exceed the total MSCA obligations. The status of the individual tasks (and site budgets) varies (see the individual tasks following for detailed descriptions):

A. Program Management: Normal activities continue with assuring the final adoption of RAPs at several sites -- Rhône-Poulenc (wetlands), Hewlett-Packard 640 & 1501, Hexcel (adopted this quarter), National Semi OU#2, etc. to assure that time schedules would be met. RD/RA and O&M continues at other sites.

B. Site Management System: The last published quarterly report for October - December 91 was distributed late January 1992. With the leave of absence of the Information System Technician for half of 1992 and transfer to another Board Division upon return, the Regional Board's latest approved workplan has rescoped the SMS to be less IST intensive and still provide greater public access (via limited paper copies and on-line BBS). Expected startup of the revised SMS is early 1994. It now appears that paper copies will still be necessary, at least of a limited nature on perhaps an annual basis, but that the updates can be maintained on the BBS.

D. Community Involvement: Up-to-date and continuing; see specific item. Work was completed on an update of the 1989 EPA brochure on "Status of Superfund Groundwater Cleanup in the South Bay" with publication and distribution in November 1993.

E2. NPL Site Oversight: Currently, we are able to keep up with the staff work load although some schedules have slipped and are still slipping [e.g. Rhône-Poulenc/Sandoz (wetlands OU), National Semiconductor OU#2]. The typical scenario finds that as the cleanup tasks in the RI/FS workplan become solidified and finalized that details formerly unknown or unresolved take on an importance not previously appreciated (e.g. HP sites). Some unforeseen slippages in the current MSCA schedules have occurred and probably will occur again (e.g. agency agreement and oversight for the wetlands portion of Rhône-Poulenc, etc.). State staff will do everything in their power to minimize slippage. Additionally, the utilization of Operable Units is being used (e.g. NSC) where a firm decision can be made on a given unit *and* a final decision on the remainder of the site can not be made for a considerable time (e.g. one year or longer). A review of the site schedule (page III-5) indicates actual and probable slippage from the schedules updated for this quarter and as changed since the last quarter's report. Details on the slippages are covered later by site, but generally they can still be categorized into four categories:

1. Upon review of the PRP submitted RI/FS and proposed RAP, the report and recommendations are inadequate and require significant administrative changes to meet EPA guidance documents; these comments come from both RWQCB and EPA staff [e.g. National Semiconductor/Advanced Micro Devices (Arques)].

2. Finishing up the RI/FS and RAP, "holes" are found in the RI/FS and RAP that must be covered with further field work and/or investigations (e.g. Rhône-Poulenc's risk assessment and both HP sites).

3. New information comes to light (usually in the field, "one last well...") that requires radical changes to the RI/FS and RAP with their ensuing delays (e.g. the HP Palo Alto sites at earlier stages).

4. Agency and public comment require significant amendment of the FS/RAP (e.g. Rhône-Poulenc).

An additional factor that may delay RODs, but probably not the state RAPs is activity by the State Department of Health Services in the preparation of Health Assessments (HA) under contract for the Agency for Toxics Substances and Disease Registry (ATSDR) as required by CERCLA/ SARA. To date, it is still not clear what the significant differences are between ATSDR/DHS' Health Assessments and the Board's BPHE and Risk Assessments or how they will be involved in RAP/ROD decision-making since the HA will not normally be available until after the Board adopts a RAP. To date, no ROD has been knowingly held up because of ATSDR's HA.

Mitigating these potential delays is the fact that the Board has required interim remediation, the definition work has been mostly completed (exception, but nearing completion -- HP's 640 and 1501 Page Mill sites in Palo Alto; and NSC OU#2), and the Board can implement enforcement quickly where needed and necessary. Staff is aware of slippages and is working to assure completion to the amended schedule as well as preventing further slippage. At this time no enforcement is planned.

Contrary to the delays cited above, Regional Board and EPA staff utilizing a "fast track" approach and a cooperative Responsible Party (Hexcel) approved and adopted an additional RAP/ROD this FFY for the Hexcel/ADS site in Livermore.

Internal over expenditures by site are primarily caused by several administrative problems:

- Within the tasks, CALSTARS reports utilized currently do not provide an appropriate breakout between indirect costs and contract costs.
- Within the task by site, over expenditures are caused by the implementation of specific site budgets where none existed before and unanticipated work or difficulty of work that could not be foreseen by the original budget. With the new award of June 1992, redirection corrected this problem (by task) as it stood then, but additional, unanticipated site work has caused some overexpenditures on some of the sites. For tracking purposes, the overall *total* task and grant budget must be utilized.

- The grant award was late due to delays in the submission and award; earlier over expenditures are now covered by the July 1990 and May 1991 award budgets and were partially reconciled with the June 1992 grant award budget redirections. No additional overall funding is requested at this time, but additional redirections were made with the remaining partial award and will be needed again. A new workplan and budget will be requested in December 1993.

- To facilitate cost-recovery, all non-site specific work (Tasks A, B, etc.) is allocated monthly to the MSCA sites in proportion to the site activity for the month. Again, the real test of budget and spending at this time is to compare the *total* "bottom line".

Under expenditures are usually caused by changes in work, over estimation of work (usually anticipated problems do not appear), delays in site cleanup (staff work not able to be performed due to project delays and awaiting reports), and changing requirements (reducing significant assistance at the MEW sites).

The table on page III-6 is a summary of the grant budget status of all the sites and shows the approved budget and total accumulated expenditures for staffing, expenses and contracts during the quarter and the life of the Cooperative Agreement (Phase II) since initial award April 13, 1988, including the July 90, May 91, June 92 and July 93 awards. The Regional Board Program Manager may request a redirection between sites to cover overages in mid-1994. No overall increase in total budget (other than approval of 1994-96 workplan) is foreseen due to these charges at this time (in fact a decrease in budget was proposed for FFY 93).

Forecasted MSCA Tasks and Activities Next 3 - 6 Months:

--Significant activity is expected as shown in the MSCA Schedule (see page III-5) to complete RI/FS (HP 640 and 1501) and finalizing Rhône-Poulenc's Wetlands RI/FS Investigation) as well as some informal Public Meetings near sites to receive comment on various phases of projects.

--Maintain time schedules in Community Relations Plans in coordination with overall schedule, especially Hewlett-Packard sites.

--Amend and extend where necessary MSCA contracts and Interagency Agreement with DHS (Data Validation).

SOUTH BAY MSCA SCHEDULE

(updated 12/15/93 by RWQCB)

Site	RI/FS and RAP Completed and Available for Public Comment		Final RAP/ROD Adopted	
	mo/yr	FFY/Q	mo/yr	FFY/Q
1. Advanced Micro Devices - Arques	*RI/FS adopted; ROD signed; RA and O&M underway*			
2. Advanced Micro Devices - Bldg 901/902	*RI/FS adopted; ROD signed; RA and O&M underway*			
3. Advanced Micro Devices 915	*RI/FS adopted; ROD signed; RA and O&M underway*			
4. Applied Materials				
Groundwater Operable Unit	*RI/FS, RAP adopted; ROD (groundwater) signed; RA and O&M underway*			
Soils Operable Unit	*Amended ground water OU ROD to include saturated soil cleanup*			
5. CTS Printex	*RI/FS and RAP adopted; ROD signed; RA and O&M underway*			
6. Fairchild, San Jose	*RI/FS and RAP adopted; ROD signed; RA and O&M underway*			
7. Hewlett Packard, 1501 Page Mill	5/94	3/94	8/94	4/94
8. Hewlett Packard, 640 Page Mill	4/94	3/94	7/94	4/94
9. Hexcel	*6/93*	*93/3*	*9/93*	*93/4*
10. Intel Magnetics / Micro Storage	*RI/FS adopted; ROD signed; RA and O&M underway*			
11. Intel Santa Clara III	*RI/FS & RAP adopted; ROD signed; RA and O&M underway*			
12. International Business Machines	*RI/FS and RAP adopted; ROD signed; RA and O&M underway*			
13. Intersil / Siemens	*RI/FS and RAP adopted; ROD signed; RA and O&M underway*			
14. National Semiconductor				
Operable Unit 1	*RI/FS adopted; ROD signed; RA and O&M underway*			
Operable Unit 2	TBD(mid 94)	TBD(mid 94)	TBD(late 94)	TBD (late 94)
15. Rhône Poulenc/Sandoz Crop Prot Corp				
Uplands Operable Unit	*RI/FS adopted; ROD signed; RA completed 11/92*			
Wetlands Operable Unit	TBD(7/94?)#	TBD (94/4?)#	TBD (11/94?)#	TBD (95/1?)#
16. Signetics	*RI/FS adopted; ROD signed; RA and O&M underway*			
17. Solvent Services	*RI/FS & RAP adopted; ROD signed; RA and O&M underway*			
18. Spectra Physics	*RI/FS adopted; ROD signed; RA and O&M underway*			
19. Synertek 1	*RI/FS & RAP adopted; ROD signed; RA and O&M underway*			
20. Teledyne	*RI/FS adopted; ROD signed; RA and O&M underway*			
21. TRW/FEI Microwave	*RI/FS adopted; ROD signed; RA and O&M underway*			
22. Van Waters & Rogers	*RI/FS and RAP adopted; ROD signed; RA and O&M underway*			

TBD=To Be Determined

Notes: Federal lead sites, for which RWQCB receives funding under MSCA for its support activities, have identical milestones, but are not included here since the RWQCB is not responsible for meeting those time schedules. The State-required RAPs are not adopted until the NBAR is completed; does not affect the Federal Superfund process, only state required Non-Binding Allocation of Responsibility (i.e. NBAR).

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MSCA EXPENDITURE/DRAWDOWN DATA
MULTI-SITE THROUGH 09/30/93

MSCA PHASE II PROJECT #	ACCOUNT NUMBER	AMOUNT AUTHORIZED	BAL OF AWARD 09-V-005	AWARD 09-V-009 07/09/93	TOTAL AUTHORIZED	ALL FISCAL YEAR DATA CUM EXP	CUM DRAWS	DIFF	NEXT DRAW	UNABLE TO DRAW
MSCA02-00		0.00			0.00	0.00	0.00	0.00	0.00	0.00
MSCA02-01		0.00			0.00	0.00	0.00	0.00	0.00	0.00
MSCA02-02	K382/KN82/KP82	157,528.00	12,945.00	28,000.00	198,473.00	139,184.17	138,857.40	326.77	326.77	0.00
MSCA02-03	K3H1/KNH1/KPH1	130,184.00	12,945.00	34,004.00	177,133.00	101,268.62	101,180.49	88.13	88.13	0.00
MSCA02-04	KP83	245,248.00		58,743.00	303,991.00	317,594.80	303,991.00	13,603.80	0.00	13,603.80
MSCA02-05	K384	35,513.00	11,030.00		46,543.00	7,721.47	7,721.47	0.00	0.00	0.00
MSCA02-06	KP62	48,408.00		22,760.00	71,168.00	66,565.10	48,302.08	18,263.02	18,263.02	0.00
MSCA02-07	KN85/KP85	271,777.00		165,321.00	437,098.00	235,551.63	233,434.92	2,116.71	2,116.71	0.00
MSCA02-08	KNH9/KPH9	407,106.00		152,700.00	559,806.00	376,877.57	369,219.48	7,658.09	7,658.09	0.00
MSCA02-09	K340/KN40/KP40	71,058.00	11,030.00	27,559.00	109,647.00	59,418.95	58,663.77	755.18	755.18	0.00
MSCA02-10	K386	38,408.00			38,408.00	6,003.90	6,003.90	0.00	0.00	0.00
MSCA02-11	KP88	118,452.00	11,030.00	18,150.00	147,632.00	133,665.90	132,391.49	1,274.41	1,274.41	0.00
MSCA02-12	KN87/KP87	170,899.00	11,030.00	18,150.00	200,079.00	180,270.51	170,899.00	9,371.51	9,371.51	0.00
MSCA02-13/20	KNJ2/KPJ2	118,345.50	11,030.00	30,164.00	159,539.50	120,498.89	118,345.50	2,153.39	2,153.39	0.00
MSCA02-14	KP89	47,178.00		28,371.00	75,549.00	60,846.91	60,717.64	129.27	129.27	0.00
MSCA02-15	K3C7	4,620.00			4,620.00	0.00	0.00	0.00	0.00	0.00
MSCA02-16	KP90	217,117.00		49,803.00	266,920.00	241,019.86	239,782.21	1,237.65	1,237.65	0.00
MSCA02-17	KP91	300,623.00		33,085.00	333,708.00	342,910.73	333,708.00	9,202.73	0.00	9,202.73
MSCA02-18	K3H5/KNH5/KPH5	151,844.00	10,063.00	17,889.00	179,796.00	150,330.12	150,228.55	101.57	101.57	0.00
MSCA02-19	K393	28,408.00			28,408.00	5,880.53	5,880.53	0.00	0.00	0.00
MSCA02-20	K3J2	118,345.50			118,345.50	99,535.30	99,157.46	377.84	377.84	0.00
MSCA02-21	KN94/KP94	125,380.00	12,945.00	31,904.00	170,229.00	128,852.66	128,674.06	178.60	178.60	0.00
MSCA02-22	K3K1/KNK1/KPK1	162,354.00	14,530.00	31,958.00	208,842.00	152,710.84	151,319.14	1,391.70	1,391.70	0.00
MSCA02-23	K3K3/KNK3/KPK3	127,045.00	11,030.00	18,150.00	156,225.00	116,283.91	115,099.69	1,184.22	1,184.22	0.00
MSCA02-24	K3K4/KNK4/KPK4	165,091.00	12,945.00	28,103.00	206,139.00	136,702.61	136,561.50	141.11	141.11	0.00
MSCA02-25	K395/KN95/KP95	157,952.00	14,530.00	31,958.00	204,440.00	152,419.75	151,889.72	530.03	530.03	0.00
MSCA02-26		0.00			0.00	0.00	0.00	0.00	0.00	0.00
MSCA02-27	K396/KN96/KP96	206,905.00	10,063.00	21,984.00	238,952.00	180,618.71	180,521.48	97.23	97.23	0.00
MSCA02-28	K397KN97/KP97	38,408.00	8,770.00	16,371.00	63,549.00	35,726.80	35,539.48	187.32	187.32	0.00
MSCA02-29	KN98/KP98	431,680.00		169,790.00	601,470.00	400,923.24	398,477.70	2,445.54	2,445.54	0.00
MSCA02-31	K3F6KNF6/KPF6	38,591.00	5,305.00	9,168.00	53,064.00	10,617.56	10,573.40	44.16	44.16	0.00
MSCA02-32	K3J9/KNJ9/KPJ9	164,154.00	11,030.00	18,150.00	193,334.00	138,096.15	139,789.06	(1,692.91)	(1,692.91)	0.00
MSCA02-33	KNJ1/KPJ1	277,412.00		116,753.00	394,165.00	267,501.70	251,740.34	15,761.36	15,761.36	0.00
MSCA02-34	KPR3	27,997.00		15,405.00	43,402.00	29,864.36	27,227.11	2,637.25	2,637.25	0.00
MSCA02-35	KP47	8,078.00		33,745.00	41,823.00	32,150.06	30,841.63	1,308.43	1,308.43	0.00
MSCA02-36	KNM6/KPM6		206,989.00	49,369.00	256,358.00	6,274.20	23,288.65	(17,014.45)	(17,014.45)	0.00
		4,612,109.00	399,240.00	1,277,507.00	6,288,856.00	4,433,887.51	4,360,027.85	73,859.66	51,053.13	22,806.53
				SITE 64	1,213,951.00					
					7,502,807.00					
				IPA	67,358.00					
				TOTAL	7,570,165.00					

11/15/93

III-6

PROGRAM ELEMENT A: PROGRAM MANAGEMENT

The RWQCB is responsible for continued coordination and implementation of the South Bay MSCA Program. These activities include, but are not limited to, the following:

- *Maintaining the direction, scope, and quality of the South Bay Program*
- *Planning and oversight of the overall program schedule and budget*
- *Interagency coordination*
- *Staffing requirements and recruitment*
- *Supervision of Community Involvement*
- *Program analysis and development*
- *Supervision of procurement*

Product

The products for Task A are the successful completion of all the tasks identified and funded under this phase of the South Bay MSCA.

Additionally, most site-file cost-recovery work will be initially charged against this task with allocation among the sites made later depending upon the actual work necessary to establish and maintain individual site-specific cost files.

Within the overall program management, the most significant program management activities during this period involved the coordination / management necessary to meet MSCA time schedules, especially those for Rhône-Poulenc, Hexcel, and Hewlett-Packard(s); preparation of the new workplan to meet EPA budget restrictions; and day to day supervision and management of ongoing MSCA tasks at ROD adopted sites (i.e. ongoing RD/RA and O&M). Significant activity is still expected over the next three months in developing the 1994-1996 workplan and budget and implementing the supervising and implementing the SMS BBS .

State Budgeted Activities

Task A involves supervising and implementing specific tasks (i.e. contracts) included in the MSCA. There is no existing state-funded budget provided for this activity. All Task A funding is MSCA funded by site.

Costs

The expenditures for the quarter as well as the grant period through 30 September 1993 are combined with the other tasks and included in the Program Budget Table on page 6.

PROGRAM ELEMENT B: SITE MANAGEMENT SYSTEM

Task Description

Under the earlier and current MSCA agreements the RWQCB implemented a computerized system to track RI (site remedial investigation), FS (feasibility studies / alternatives evaluation), and the implementation of remedial action activities for use of the RWQCB, Cal/EPA-DTSC and EPA management personnel for use in site enforcement and task tracking.

Additionally, as part of the community involvement program the SMS has been distributed to 15 municipal agencies, 9 libraries, 7 state and federal agency representatives, 2 environmental groups, and 1 manufacturers group, as well as sold (for reproduction costs) to those desiring it (primarily consultants).

Products

No quarterly report was produced this quarter per the revisions approved in the January 1992 workplan. The Board has changed the SMS, at least in its present form. The 1992-93 workplan supports a significantly reduced SMS effort, at least for the "paper" portion. Regional Board will implement this "new" SMS in late 1993 utilizing a computer Bulletin Board format with a computer purchased in early December utilizing MSCA funds. The BBS portion went on-line March 18, 1993. The yearly paper edition will be completed late fall 1993.

State Budgeted Activities

There is no existing State-funded budget or activities for the Site Management System.

Cost

Expenditures for Task B are included in the Program Costs Table on page 6.

PROGRAM ELEMENT D: COMMUNITY INVOLVEMENT

Task Description and Objectives

The main objectives of community involvement activities performed under the MSCA are:

Provide the general public with information on ground water systems, water supply sources, water quality, hazardous waste regulatory processes, and scope, progress and findings of remedial response activities.

Provide sufficient background information about technical and environmental issues to help the public understand and assess remedial actions.

Provide information, especially technical findings, in a form understandable to the general public.

Provide elected officials and the media with timely detailed information at key points throughout program activities.

Use the media as a major means of disseminating information to the general public.

Establish a two-way information exchange with environmental, public interest, and other concerned groups throughout the remedial response program.

Provide the means for all interested individuals to express concerns and make inquiries throughout project activities. (the opportunity for two-way communication is particularly important because of the length and complexity of the project).

Use the Groundwater Task Force, for overall coordination and review of community involvement efforts.

Create an interagency community involvement team to further coordinate the flow of information from agencies to the public.

Monitor public concerns and information needs

Modify the community involvement plan(s) to respond to changes in community attitudes and needs.

Community involvement activities conducted under the MSCA function independently, but coordinated with, EPA's area wide community involvement strategy as well as DHS's site community involvement programs. Under this approach, EPA assumes the lead role in coordinating area-wide community involvement activities in the South Bay. Specifically, the RWQCB will be responsible for providing information and directing community involvement activities for RWQCB-lead sites.

Community Involvement activities will be significantly reduced beginning this quarter as the IGA staff on-loan from EPA returns to EPA and all Community Involvement work will be handled by Board staff. Losing the full-time staff is somewhat mitigated by the reduced workload with only several sites awaiting completion of RAP/RODs as well as significant planning to assure a satisfactory transition.

Products

The following activities were completed during the Quarter, primarily utilizing IGA staffing with student assistance:

1. The regular meetings with Barron Park Association members and representatives of Hewlett-Packard were held at HP headquarters.

2. Arrangements were made for the public comment period and public hearing on the Hexcel Superfund site in Livermore. Jim Thompson and Mark Johnson met with City of Livermore Officials on July 29, 1993 to discuss the upcoming comment period and

the city's plans for the North Mines Road Overcrossing. The public hearing was held.

3. Preparation of the report on cleanup progress in the South Bay was completed. Input was received from several outside parties, and editorial changes were made. Preliminary specifications for printing were made, and bids for typesetting were obtained.

Future Activities

Future activities are currently scheduled to meet the MSCA Special Conditions time line (as revised) requirements, especially for the Hexcel and Hewlett-Packard site(s). Although IGA staffing is reduced from a year ago, current IPA staffing better matches the forecasted Community Involvement needs. Backup as needed will be provided by Board staff and this may require changing some contract funds to personal services funds at a later date.

Costs

Work on this MSCA task is primarily by a contract IGA with very limited state employee participation. This task accommodates the budget necessary for site-specific NPL Community Involvement programs above and beyond technical (i. e. engineer/geologist) assistance which is already budgeted within the NPL Site Oversight task. See the Table on page III-6 for overall grant budget status that includes Community Involvement costs by site.

PROGRAM ELEMENT E: TIER I ACTIVITIES

Tier I activities are those activities that occur at specific sites in the South Bay.

TASK E1.*	IDENTIFICATION OF NEW SITES	TASK E2.	RWQCB OVERSIGHT OF NPL PRP ACTIVITIES
TASK E1a.*	SCREENING OF NEW SITES IN ORDER TO CONDUCT Pas ON MOST SENSITIVE SITES		
TASK E1b.*	OVERSIGHT OF PRP SI		

*Note: These tasks were not requested for funding in this Phase; they may be considered at a later time if conditions change.

Regional Board activities in this task cover the RI/FS oversight RD/RA and/or regulation underway at the 31 South Bay MSCA Superfund sites (32 companies/agencies either final and proposed including Hexcel in the Livermore Valley and Liquid Gold and United Heckathorn in Richmond) for which the Board as a regulatory agency has either the current lead (22) or the supporting agency role (9). The current Agency-Lead and NPL Status as of this report are covered below.

EPA Lead Superfund Sites:

*1. Fairchild Semiconductor Corp., 464 Ellis St., Mountain View
*2. Intel Corp., 365 E. Middlefield Rd., Mountain View
3. Jasco Chemical Company, 1710 Villa St., Mountain View
4. Lorentz Barrel and Drum, 1515 S. 10th St., San Jose
5. Moffett Naval Air Station, Sunnyvale
*6. Raytheon Company, 350 Ellis St., Mountain View
7. United Heckathorn, Richmond
8. Westinghouse Electric Corporation, 401 E. Hendy Ave., Sunnyvale

RWQCB Lead Superfund Sites:

*1. Advanced Micro Devices, 901 Thompson Pl, Bldg.901, Sunnyvale
2. Advanced Micro Devices, Bldg. 915., 915 Deguigne Dr., Sunnyvale
*3. AMD-Arques, (formerly Monolithic Memories, Inc.), 1165 East Arques Ave., Sunnyvale
4. Applied Materials, 3050 Bowers Avenue, Santa Clara
5. CTS Printex, 1905-1931 Plymouth St., Mountain View
6. Fairchild Camera and Instrument Corp., Bernal Road, San Jose
7. Hewlett-Packard, 640 Page Mill Rd., Palo Alto
8. Hewlett-Packard, 1501 Page Mill Rd., Palo Alto
9. Hexcel, Livermore
10. Intel Facility III, 2880 Northwestern Parkway, Santa Clara
11. Intel Magnetics/MicroStorage, 3000 Oakmead Village Dr., Santa Clara
12. International Business Machines, Cottle Road, San Jose
*13. Intersil, Inc., and Siemens Components, Inc., Cupertino
*14. National Semiconductor, 2900 Semiconductor Dr., Santa Clara
15. Rhône-Poulenc/Sandoz, 1990 Bay Road, East Palo Alto
*16. Signetics, 811 E. Arques, Sunnyvale
17. Solvent Services, 1022 Berreyessa Road, San Jose
*18. Spectra-Physics, Inc., 1250 West Middlefield Road, Mountain View
19. Synertek #1, Santa Clara
*20. Teledyne Semiconductor, 1300 Terra Bella Ave., Mountain View
*21. TRW Inc., 825 Stewart Pl., Sunnyvale
22. Van Waters & Rogers, Inc., 2256 Junction Ave., San Jose

* above sites will be treated as part of a combined site, at least for off-site work.

Cal/EPA-DTSC Lead Superfund Sites:

1. Liquid Gold, Richmond

EPA NPL Modifications (RCRA "drop" sites):

EPA's proposed rule-making in June 1988, (NPL Update #7) recommended that 6 NPL sites be deleted from the NPL since they are RCRA sites. Two other RCRA sites were proposed to be retained on the NPL. RWQCB officially commented to EPA-HQ on this proposal to delete high-priority RCRA sites by questioning the timeliness of the RCRA regulation update, future MSCA funding for these CERCLA/RCRA sites, and the lack of Technical Assistance Grants to citizen groups for RCRA (only) sites. EPA-IX has stated that the RCRA sites (proposed deleted and those remaining) will be treated as NPL sites to assure attention to cleanup appropriate to their NCP HRS scoring.

On October 4, 1989, EPA announced its final rule on the dropping of some of the NPL sites that are also RCRA sites. Under this rule, the following sites have been dropped from the NPL:

Hewlett-Packard, 1501 Page Mill Road
IBM, San Jose
Rhône Poulenc/Sandoz, East Palo Alto
Signetics, Sunnyvale
Van Waters and Rogers, San Jose

EPA and the Board, per policy, continue to treat the RCRA "drop" sites the same as NPL sites in terms of requirements, tasks, and cleanup.

Products during Reporting Period:

Regional Board actions / Orders affecting the South Bay MSCA:

July: Hexcel -- initial hearing on RAP
MS/Intel Mag -- amend SCR (continued)
August: HP 1501 -- amend time schedule
September: Hexcel -- adopt final RAP

South Bay MSCA Superfund Site Cleanup Decisions (Remedial Investigations/Feasibility Studies/Remedial Action Plan): All the South Bay Superfund sites have performed significant amounts of work to meet Superfund final cleanup decision requirements. The tasks remaining are necessary to meet State and Federal Superfund (almost all of which the State requires as well) requirements to determine the best alternative cleanup plan considering protection of public health and the environment as well as the maintenance (i.e. high quality groundwater) and protection of the resource (i.e. water conservation and reclamation).

Board staff conducted the following tasks as detailed in the EPA OSWER Memorandum dated October 1,. 1986, entitled, "CERCLA Funding of Oversight of Potentially Responsible Parties by States at National Priority List Sites. "

Review Tasks (all sites):
--Reviewed and commented on scope of work and work plans (all work plans requested and approved as of August 1990; updating due to operable units still may be necessary)
--Reviewed and commented on updates to Safety Plans
--Reviewed and Commented on drafts of portions of RI reports (all)
--Reviewed/discussed FS objectives
--Completed PRP reports (all)
--Organized and participated in technical meetings on the RI/FS with PRPs, PRP contractors, and/or EPA. (all)
--Provided Technical Support to the Community Relations Task for:
Briefing of local and state officials
Prepared fact sheets and press releases

Field Related Tasks:
--On-site presence/inspection as necessary (all)

In addition, at RWQCB lead sites the following tasks were in progress by RWQCB staff or contracted by the RWQCB:

--Data Validation (all by IAG with DHS)
--Public Health Baseline Evaluation
(all work other than by PRP by contract award to ICF/Clement for both BPHE, BPHE review, and RI/FS review)
--Maintenance of the Administrative Record
(primary use of PRPs for initial preparation)
--Continue Implementation of Cost Recovery
(all)

For those sites where the RWQCB is the Support Agency, staff provided support in the tasks described above to the extent necessary but not to exceed the staffing levels previously approved (exceptions are noted in the Board's letter and memorandums of February 9, and May 3, 1993, respectively, requesting budget redirections and reductions for final FFY 93 award). Sites primarily affected: MEW, Lorentz, United Heckathorn, Westinghouse, JASCO, Liquid Gold.

For those sites under Regional Board lead, the IBM, Fairchild San Jose, Applied Materials, Intel SCIII, Intersil/Siemens, Solvent Services, AMD 901/902, AMD 915, AMD Arques, CTS Printex, National Semiconductor OU#1, Microstorage/Intel Magnetics, Signetics, Rhône-Poulenc/Sandoz (Uplands OU), TRW/FEI Microwave, Teledyne, Spectra-Physics, Synertek #1, Van Waters & Rogers, and Hexcel, sites have completed the RI/FS and RAP and a ROD have been signed in this MSCA grant phase (See Table, Page III-5).

Costs and Budgets:. Even with the addition of the June 1992 grant award and the budget redirection among sites, some **site specific** over- and under- expenditures are occurring. While no new grant funds will be required, proposed redirection among sites in the July 30, 1993, award have been made.

The following is a description of the MSCA funded staff work and the current status at each of the MSCA Superfund sites.

REGIONAL BOARD LEAD SUPERFUND SITES:

ADVANCED MICRO DEVICES 901-902,SIGNETICS, TRW (FEI) MICROWAVE (THE COMPANIES)

The Final Remedial Action Plan (RAP) for the site was adopted by the Board in June 1991.

AMD OPERABLE UNIT
The groundwater monitor report for the AMD operable unit was submitted in October 1993. The eight-well extraction system pumped an estimated 3.2 million gallons during this quarter. As expected, the majority of this water was extracted from the B1 and B2 water-bearing zones.

A summary of contaminant removal and extraction system operation for this quarter was included in the report. Based on average contaminant concentrations, the system removed about 15.6 pounds of VOCs during the quarter for a total of 496 pounds removed since the project began in 1984.

SIGNETICS OPERABLE UNIT
The progress and monitoring report for this quarter at the Signetics operable unit was submitted in October 1993. The extraction system removed more than 12 million gallons of water during this quarter. The average extraction was 92 gallons per minute. The majority of the water extracted is attributable to the B-zone extraction wells and the 440 Wolfe building sump. However, the majority of contaminant removal is attributable to the B-zone extraction wells since contaminant concentration is lower in the water captured by the building sump.

The treatment system was in compliance with NPDES requirements. Groundwater pumping resulted in an estimated removal of 670 pounds of TCE during this quarter. The groundwater extraction systems have removed more than 18,000 pounds of TCE since 1987. The soil vapor extraction system removed 7.2 pounds of VOCs during this quarter. The vapor extraction system has removed a cumulative 709 pounds of VOCs since its inception in 1988.

TRW OPERABLE UNIT
The progress and monitoring report for this quarter at the TRW operable unit was submitted in October 1993. The treatment system operated throughout the quarter with minimal down-time.

No significant changes in contaminant concentration or distribution were reported for the quarter. The average extraction rate for the seven extraction points was 22 gallons per minute during the quarter for a total of 2.9 million gallons. The cumulative VOC removal since 1985 is estimated to be over 2419 pounds of VOCs.

OFFSITE OPERABLE UNIT
The progress and monitoring report for this quarter for the Offsite operable unit was submitted in November 1993. The extraction system removed over 19 million gallons of water during the quarter. The estimated removal of VOCs for this quarter is 133 pounds. The cumulative removal of VOCs is estimated at over 4681 pounds since 1988.

REGULATORY EVENTS THIS QUARTER
None

PROJECTED EVENTS FOR NEXT QUARTER
Quarterly monitoring of the remediation activities at the site will continue through the next reporting period.

ADVANCED MICRO DEVICES, BUILDING 915, 915 DEGUIGNE DRIVE, SUNNYVALE, SANTA CLARA COUNTY

The Final Remedial Action Plan (RAP) for the site was adopted by the Board in June 1991.

ACTIVITIES THIS QUARTER
The third quarter monitoring report was submitted in October 1993. Almost half of the A-zone wells (6 of 13) were dry at the time quarterly samples were collected. As a result, groundwater extracted at the site is produced primarily by the B-aquifer. Approximately 8.3 million gallons of groundwater was extracted during this quarter.

The estimate of total VOCs removed since 1984 by groundwater extraction is 3941 pounds with 19 pounds removed during this quarter.

The contaminant plume had been detected in the two downgradient monitoring wells located off-site to the north (MW-44, MW-45). Extraction well EW-9 is now operational and is expected to capture the plume and control further migration from the site.

REGULATORY EVENTS THIS QUARTER
None

PROJECTED EVENTS FOR NEXT QUARTER
Quarterly reports documenting progress will be submitted throughout 1994. The impact of upgradient sources on the AMD 915 system will continue to be monitored. Documentation of the effectiveness of the additional extraction well will be included in each quarterly report.

UNRESOLVED ISSUES:
Evaluation of the effectiveness of modifications to the B2 aquifer extraction system and control of migration of contamination.

APPLIED MATERIALS, INC. BUILDING 1, 3050 BOWERS AVENUE, SANTA CLARA

SITE ACTIVITY/ACCOMPLISHMENTS

1. Monthly reports (NPDES) are being submitted as required. There were no reported discharge violations. However, we received an inadequate report of the "daily flow rate" (reported by daily totalizer readings) for the month of August and requested an explanation from the discharger, along with an assurance that action was being taken to prevent this from happening in the future. The discharger did respond and has taken action to remedy the problem.

2. Applied Materials submitted the periodic self-monitoring report for the period February-May 1993.

3. In response to a request from the U.S. EPA, the discharger compiled a "Remedial Action Report" dated September 17, 1993. The report is a summary document of remedial activities, and includes a summary of total agency oversight costs ($301,737) through June 30, 1991 for the Board, and July 31, 1991 for the U.S. EPA.

4. The discharger provided two copies of the Administrative Record for the period January 1 - June 16, 1993.

5. The discharger has reported the near-completion of a project to install two valves and equipment to control flows to the storm drain in the event of a spill of hazardous material, as required by the City of Santa Clara, and has asked if the Board has any requirements. These valves will normally be open, but one or both will be closed electronically if an emergency arises because of a spill. One valve serves Building 1, the other serves Buildings 2 and 3 (north of Building 1). Shutting one or both of these valves will mean shutting down the Building 1 groundwater extraction and treatment systems.

AGENCY (BOARD) ACTIVITY/EVENTS

1. Board staff reviewed the monthly reports and the self-monitoring report and commented as appropriate.

2. Jim Thompson (Community Involvement staff) prepared a revision to the Community Relations Plan, dated August 1993, and a Community Relations Plan, Transfer of Responsibility Form dated 09/20/93 (as a supplement to the August 1993 Plan).

3. Patti Collins (U.S. EPA) prepared a Record of Decision 1993 Final, and a Superfund Preliminary Close Out Report for the site, in September 1993.

4. Board staff responded to inquiry from the discharger concerning what might be required by the Board as a result of the discharger installing two valves and appurtenances to control site flows into storm drains. These valves are normally open, but one or both will be closed (electronically) if an emergency arises because of a spill that could release hazardous materials to the storm drain. One valve serves Building 1, the other serves Buildings 2 and 3 (north of Building 1). Closing these valves will mean shutting down the Building 1 groundwater extraction and treatment systems. Staff requested the

discharger to provide information to update the air stripper O & M Plan which is part of the Best Management Practices Plan (BMPP) previously submitted as required by the NPDES permit. No date was set for the submittal, but the discharger said it would be submitted after construction/installation of both valves and electronic controls has been completed.

During the next quarter (October-December 1993) staff expects the discharger to submit routine monthly NPDES permit reports and the BMPP (air stripper O & M) update.

CTS PRINTEX, 1905, 1911, 1921, and 1931 Plymouth Street, Mountain View

CURRENT STATUS:

Upgradient Source Investigation
On July 9, 1993 Regional Board staff met with CTS to discuss the possible upgradient source issue. Based on groundwater data from monitoring well 39W and groundwater modelling data, CTS has maintained that there is an upgradient plume which contributes to their contaminant plume. Concentrations in upgradient well 39W (corner of Sierra Vista and Colony) have ranged from 33 to 42 ppb TCE and 4.9 to 6.0 ppb for trans-1,2-DCE.

CTS' consultant provided us with names and addresses of owners and tenants along Old Middlefield Road that have a registered monitoring well. They asked that we request chemical use history from these companies, and to provide access to CTS to sample and analyze from the monitoring wells at CTS' expense.

On July 13, 1993 Regional Board staff sent chemical use history requests to six companies located on Old Middlefield Road. For one of the companies known to have a fuel tank, located at 1931 Old Middlefield, that owner (Mr. Fred Haeckl) elected to do his own sampling and analysis. That property is currently on record with the SCVWD for leaking underground fuel tanks.

The results of the survey revealed the presence of TCE and cis-1,2-DCE in the upgradient well of the 1931 property; their two downgradient wells indicated relatively low values of solvents. Concentrations of TCE in the upgradient well (2 samples in July and August 1993) were 170 and 94 ppb; for cis-1,2-DCE were 320 and 30 ppb.

The consultant for 1931 believes that property is being impacted by an upgradient source. None of the other businesses located on Old Middlefield apparently used solvents, nor had solvents in monitoring wells where CTS could gain access for sampling.

While the results at 1931 are of concern, the concentrations at CTS well 39W are not significant. Based on the concentrations at 39W and the limited Regional Board staff time available, we do not have the resources for a focused investigation of this area. The site at 1931 Old Middlefield Road should be put on the self-directed mode and a potential upgradient impact can be investigated at some time in the future.

CTS Quarterly Groundwater Monitoring
Groundwater extraction systems continued operation and a report submitted October 15, 1993 for the third quarter 1993 groundwater monitoring indicated there was no significant change in the water table from the previous quarter. Chemical concentrations also showed no appreciable changes from the previous quarter.

PROJECTED ACTIVITIES FOR SIX MONTHS:

No new tasks are required; groundwater extraction and monitoring will continue.

FAIRCHILD, SAN JOSE

CURRENT STATUS:
The final Remedial Action Plan (RAP) was adopted by the Regional Board in January 1989. The RAP set cleanup standards for on-site groundwaters at MCLs and for off-site groundwaters at less than one fourth the MCLs. In order to help meet these cleanup standards, soil cleanup goals were set for the on-site area, which is surrounded by a slurry wall. The Regional Board amended the RAP in May 1990 in response to soil-cleanup issues raised during an appeal. This modification allowed Fairchild to demonstrate that its prior soil cleanup was sufficient to protect groundwater. Fairchild would return water to the on-site aquifers and see whether chemicals remaining in the soil leached out. RAP modifications do not change the groundwater cleanup standards, but rather the methods used to achieve those standards.

Fairchild proposed three further modifications to its remedial program in September 1991: a new on-site extraction well, cyclic groundwater pumping on-site, and a one-year shut-down of the off-site extraction wells. Board staff approved all three. The first two modifications, implemented in late 1991, are intended to enhance the efficiency of the on-site remedial actions. The third modification, implemented in December 1991, is based on computer modeling which shows that groundwater pumping is ineffective in speeding up remediation of the aquifers at this site. This model predicts that off-site cleanup will take 15 years, whether or not off-site pumping occurs.

During the last quarter, Fairchild operated the on-site extraction system for one month (July), discharging the treated groundwater to the storm drain. This is consistent with the cyclic pumping plan cited above. Pumping rates averaged 45 gpm in July, with a total of 1.9 million gallons of groundwater and 24 pounds of VOCs removed. On-site VOC concentrations are declining but cleanup goals are still exceeded in the area near the former underground tank. For the first time since slurry wall construction, Fairchild observed some resaturation of the A-aquifer.

FUTURE ACTIVITIES/TASKS:
The off-site extraction wells were shut down as part of the approved demonstration project. The no-pumping program will continue pending Fairchild's submittal of the 5-year review (see below). During this quarter, VOC concentrations did not increase or migrate, consistent with modelling results and prior sampling results.

During the next six months, Fairchild will continue on-site groundwater extraction. Fairchild has proposed an expanded pumping program (60 gpm continuous versus 50 gpm cyclic) in order to keep the A-aquifer unsaturated. Board staff have approved this proposal pending submittal of the 5-year review, which is due January 1994. Water reuse will be reconsidered in light of the higher discharge volumes.

HEWLETT-PACKARD, 640 Page Mill Road, Palo Alto

CURRENT STATUS:
An RI/FS was submitted on April 1, 1991 for on-site and off-site in the California, Olive and Emerson Streets (COE) area. The RI/FS was considered not complete due to the discovery of a more complex hydrogeologic environment then first predicted. Additional data that was required to resubmit the RI/FS has been gathered in the area east of Matadero Creek. This data has resulted in complete definition of the vertical and lateral extent of the off-site plume. The final Baseline Public Health Evaluation (BPHE) was completed in September 1992 by EPA's consultant, Clement International, for the on- and off-site areas. The RI for the on-site and COE areas was submitted on June 24, 1993, and is currently under review, with response by Board staff to HP by the end of November.

Construction of the new office building at the 640 Page Mill Road site is under way. The vapor and groundwater extraction wells that will operate under the building have been completed and will be hooked up to the main treatment systems when the building is completed in the upcoming quarter.

Twelve off-site and on-site groundwater extraction wells have been installed as part of the Interim Remedial Measure program at the site. These wells have not yet been connected to a treatment system. Despite access problems, work is progressing to complete the off-site treatment system by March, 1994.

FUTURE ACTIVITIES
The installation of the conveyance piping to connect the approved off-site extraction wells will begin to be installed this quarter. Additional groundwater extraction wells will be required in the future. Review of the RI/FS (already submitted) is scheduled to be completed in November. A proposed plan for cleanup will be available to the public in April. Draft Site Cleanup Requirements are scheduled to be available to the public in March, with final adoption scheduled for July 1994.

HEWLETT-PACKARD, 1501 Page Mill Road, Palo Alto

CURRENT STATUS:
Site Cleanup Requirements were adopted in June 1991 establishing RI/FS tasks and schedules. The RI/FS was originally due in June of 1991. HP submitted a revised RI in April 1992. Board staff have reviewed the RI, and made comments to HP in December 1992. Due to the discoveries of additional chemical plumes and due to the need for further definition of the known plumes,

the Order has been amended to require submittal of a revised RI/FS by January 17, 1994. HP intends to resubmit the RI in November 1993. The Baseline Public Health Evaluation (BPHE) is currently being examined by EPA to be sure that HP's revisions are adequate.

The site currently has six interim remedial measure extraction wells in operation. The most recent three extraction wells help capture the area of the northwest TCE plume with the highest chemical concentrations. The plume is fairly well defined off-site.

FUTURE ACTIVITIES:
Board staff will receive comments from EPA regarding the BPHE for this site. Additional off-site work for extraction wells and access issues continues. The proposed plan for final cleanup is due in mid-March and the fact sheet informing the public is due out in mid-May. Draft Site Cleanup Requirements will be released in May, with final adoption scheduled for August 1994.

HEXCEL CORPORATION, Livermore, Alameda County

ACTIVITIES DURING JULY-SEPTEMBER
The FS for the Site was received on June 30, 1993. It was reviewed, revised and a Proposed Plan was developed in early July. A Proposed Plan Fact Sheet was developed an d forwarded to the public announcing the opening of the Public Comment Period which ran from mid July to mid August. The matter was also brought before the Board at the July Board meeting to announce the opening of the Public Comment. A public meeting was held in Livermore on July 22, 1993 to solicit comments. A Responsiveness Summary was prepared to respond to the comments. The Remedial Action Plan (RAP) was brought before the Board at the September Board meeting and adopted. The ROD was signed later that month by EPA.

FUTURE ACTIVITIES:
HEXCEL is being delisted from the NPL by EPA. There will be no further activity on HEXCEL as part of the MSCA except for cost-recovery activities. The Reginal Board will be regulating site cleanup under its authority and also under cost-recovery. This cleanup may be complicated by HEXCEL's declaring Chapter 11 bakruptcy in early December.

INTEL, SANTA CLARA III, Santa Clara

CURRENT STATUS:
The Final RAP for the site was adopted by the Board in July 1990. Intel submitted a report titled "Cyclic Pumping Demonstration Project, Evaluation and Evaluation Recommendations for Further Actions" in late 1991. Cyclic pumping (also known as pulsed pumping) is believed to be a method for improving groundwater remediation efficiencies.

Based on this October 1991 report, Intel has tried both 60-day on/60-day off and 120-day on/120-day off pumping cycles. Intel has submitted effectiveness reports on these cycles that conclude that these pumping cycles are no more efficient than continuous pumping. Board staff has met with Intel to discuss the most recent results of the demonstration project. In response to requests by Board staff, Intel proposed a new demonstration project involving various cyclic pumping schemes that began on January 15, 1993. Staff anticipates receiving the results of this new project in the fourth quarter 1993. Staff is scheduled to meet with Intel to discuss the results of the cyclic pumping project.

FUTURE ACTIVITIES / TASKS
On-site groundwater extraction and treatment as described above continues as part of the final remedial action at the site. Currently, approximately 30,000 gallons per day of groundwater is extracted and treated to remove volatile organic chemicals. Board staff will continue to monitor the site and review quarterly reports submitted by Intel.

INTERNATIONAL BUSINESS MACHINES, San Jose

CURRENT STATUS:
The final Remedial Action Plan (RAP) was adopted by the Regional Board in October 1988. It set cleanup standards similar to those for Fairchild (San Jose) and included soil vapor extraction (on-site) and continued groundwater extraction (on and off-site). IBM's cleanup program is strongly affected by groundwater elevations, which vary dramatically depending on rainfall as well as recharge by the Santa Clara Valley Water District.

During the last quarter, IBM continued implementation of the RAP. IBM extracted and treated about 88 million gallons of groundwater

for the quarter, reusing about 70 million gallons (or 80%) of this total volume. All on-site extracted groundwater was reused, by reinjection, landscape irrigation, or as feed water for industrial use. Most off-site groundwater was discharged to Canoas Creek. The soil vapor extraction system continued to be effective, removing over 4,000 pounds of VOCs and hydrocarbons from on-site soils during the quarter. On August 31, 1993, IBM submitted an evaluation of reduced off-site pumping rates. The report concludes that the one-year pumping reduction has not caused any migration of the chemical plume off-site.

FUTURE ACTIVITIES:
During the next six months, IBM will continue its cleanup program. Efforts to reuse off-site extracted groundwater will be postponed, pending a determination of the optimal pumping rate. The 5-year review for IBM's cleanup program is due in October 1993 (submitted October 19).

MICRO STORAGE/INTEL MAGNETICS, Santa Clara

CURRENT STATUS:
The Final Remedial Action Plan (RAP) for the site was adopted by the Board in July 1991. Draft deed restrictions to prohibit the use of the shallow groundwater at the site have been submitted by the two property owners. Kim Camp III's deed restriction has been signed by the Executive Officer and returned to Kim Camp III to be recorded with Santa Clara County.

Intel (on behalf of the property owner, 3000 Oakmead Village Drive Ltd.) submitted its most recent revised deed restriction in the fourth quarter 1992. Board legal staff is currently trying to resolve a remaining point of disagreement with Intel.

The Regional Board has approved staff's recommendation that Boehringer Ingelheim (BI) and International Diagnostic Technologies (IDT), be added to the RAP. This recommendation is based on a review of the site's groundwater quality, groundwater flow, and other hydrogeologic data, which indicated that a release of solvents to groundwater had taken place during International Diagnostic Technologies' (IDT's) tenancy at the site. BI was the parent company of IDT during the time IDT was a tenant at the site. The Board adopted an ammendment to the final RAP in November 1993 naming IDT and BI as additional primary responsible parties.

FUTURE ACTIVITIES / TASKS:
Currently, approximately 11,000 gallons per day of groundwater is extracted and treated to remove volatile organic chemicals. Board staff will continue to monitor the site and review quarterly reports submitted by the PRPs.

NATIONAL SEMICONDUCTOR CORPORATION & ADVANCED MICRO DEVICES (1165 ARQUES, formerly Monolithic Memories), Sunnyvale / Santa Clara

At the NSC and AMD sites, work completed and work projected is pursuant to the final Remedial Action Plan (RAP) adopted by the Board at its September 1991 meeting. The RAP contains compliance tasks and time schedules for the remediation of soil and groundwater in Operable Unit 1, which consists of the NSC and AMD facilities and the downgradient commingled plume area.

Orders for Site Cleanup Requirements for the OU2 sites (located east of the AMD and NSC sites) were adopted in the October Board meeting. The Orders require further investigation at the 999 Arques Corporation site, the Inprint/Sobrato Development site, and the CAE-Link Corporation site. Once investigations for these sites are complete, staff will be able to better determine what modifications are necessary to the Operable Unit 1 and 2 boundaries, and to the parties named in the Operable Units.

National Semiconductor
Additional soil samples were obtained in order to further characterize contamination at source areas at the NSC site. As of September, soil vapor extraction wells have been installed in 11 of the 12 contaminant source areas, and pilot tests were conducted in eight of the areas. Extraction of VOCs at one source area is continuing at a rate ranging from 4.5 to 12.9 pounds per day.

The groundwater treatment system has continued to operate in compliance with the NPDES permit. During the 3rd quarter of 1993, the groundwater treatment system extracted approximately 160 gallons per minute, and removed a total of 123 pounds of VOCs.

Advanced Micro Devices - Arques site
The soil vapor extraction system continued operation, removing a total of 83 pounds of VOCs during the third quarter of 1993. Low levels of five PNA compounds were detected in the extracted soil vapor, indicating that to some degree, PNAs were being remediated. Additional discrete soil samples will be obtained from PNA contaminated areas in order to further determine the degree of PNA contamination.

Groundwater monitoring reports and NPDES monitoring reports for the third quarter of 1993 have been submitted and reviewed. Groundwater continues to be extracted from a network of on-site wells and treated. During the third quarter 1993, the system extracted approximately 30 gallons per minute and removed a total of 18.5 pounds of VOCs. No violations of NPDES permit requirements

RHONE-POULENC SITE, East Palo Alto, San Mateo County

ACTIVITIES DURING JULY-SEPTEMBER
The Regional Board staff have coordinated agency discharger meetings and conference calls regarding statistical approaches to interpretation of data collected for the Ecological Assessment of the Wetlands Operable Unit. Because of the large complex data set, agencies the process is slow moving. At present the statistical approach has been finalized and the discharger is running the full data set for arsenic. This will be forwarded to the agencies in early November for their review. Upon approval of the arsenic data, the other metal data will be run.

Draft deed restrictions for properties located in the Upland Operable Unit have been submitted for Board review and comment. Staff have been working with the discharger and EPA to develop an acceptable form. A final draft was submitted to the Board in October and were signed by the Executive Officer.

Board staff have discussed with agencies the readjustment of the boundaries of the Upland OU to include the Torres property which is currently in the Wetland OU. This would allow the property to be remediated before the remainder of the Wetland OU, which at this point will probably be in 1996 and 1997. Should this proposal be accepted by the agencies, work on the Torres property would begin in the beginning of the 1994 dry season.

ACTIVITIES ANTICIPATED DURING JULY-SEPTEMBER
To prevent any further delays in revision and finalization of the Ecological Assessment, Board staff will continue to coordinate agency/discharger meetings and conference calls.

Board staff will be working with all agencies to get their concurrence on revising the boundaries of the Upland OU to include the Torres Property. Staff will also work with EPA to develop an Explanation of Significant Difference (ESD) for this change.

SIEMENS COMPONENTS INC., 19000 Homestead Road, Cupertino; INTERSIL INC., 10900 N. Tantau Road, Cupertino

CURRENT STATUS:
The final Remedial Action Plan for this site was adopted by the Regional Board in August 1990, and EPA issued a concurring ROD. The RAP called for additional groundwater extraction wells and soil vapor extraction wells. All work needed to implement the RAP has been completed. With the addition of the new wells, Intersil has 7 soil vapor wells and 7 groundwater extraction wells; Siemens has 16 soil vapor wells and 18 groundwater wells; and offsite there are 3 extraction wells. Additional treatment facilities for groundwater and soil vapor have been installed. The final off-site groundwater extraction system as proposed in the RAP has been completed.

In April 1992, Siemens/Intersil requested permission to close four deep-aquifer monitoring wells off-site, in order to avoid possible damage due to construction activities. Board staff approved the request on June 4, 1992, given that no VOCs were detected in these wells. Shortly afterward, the City of Santa Clara reported PCE concentrations slightly over drinking water standards in a down-gradient public well. Continued monitoring has confirmed the presence of PCE in the Santa Clara Well #24. The source is not believed to be Siemens/Intersil. The four deep-aquifer monitoring wells are still in existence, the Santa Clara Valley Water District has taken ownership and responsibility of these wells.

During the third quarter, monitoring and remediation continued as required by the RAP. Intersil requested revisions to its Self-Monitoring Program for the Intersil On-Site Area. This request has been approved by Board staff. Intersil removed its SVE system.

Siemens has also requested revisions to its Self-Monitoring Program. This request is under review by Board staff. Siemens requested to shut off 4 inactive soil vapor extraction wells. This request was approved by the Board staff, and wells were decommissioned.

FUTURE ACTIVITIES:
Monitoring and remediation will continue.

SOLVENT SERVICE INC. (SSI), 1021 Berryessa Road, San Jose, Santa Clara County

The Final Remedial Action Plan (RAP) for the site was adopted by the Board in August 1990.

ACTIVITIES THIS QUARTER
Operation of the groundwater extraction and treatment systems continued throughout the quarter. The steam enhanced vapor extraction system (SIVE) has been temporarily removed from operation to allow final installation of the cap on the site, as part of other construction activities on the site. The vapor extraction wells were drilled out and rehabilitated to increase the efficiency of the system.

REGULATORY EVENTS THIS QUARTER
The site sampling and analysis plan was amended to change the timing and the approved methods of sampling the wells.

PROJECTED EVENTS FOR NEXT QUARTER
Quarterly monitoring reports will be submitted within thirty days of the end of each calendar quarter. Site construction activities began in January, which include destruction of several buildings and the installation of an asphalt cap over the entire site. Construction continued through the third quarter and work is proceeding on schedule. The completed remediation system is expected to be online in January of 1994.

A vapor extraction system has been installed on the western property boundary to address the free-phase petroleum plume origionating from the Chevron Fuel Terminal across Berryessa Road.

UNRESOLVED ISSUES:
The status of remediation of dissolved phase hydrocarbons, and solvents on the western property boundary must be resolved following the completion of removal of free product hydrocarbon from this area.

SYNERTEK #1, Santa Clara

CURRENT STATUS:
The Final RAP for the site was adopted by the Board in March 1991. Operation of the B zone groundwater reinjection system commenced in December 1991. The reinjection system consisted of two extraction wells pumping a combined total of six gallons per minute (gpm) and one reinjection well reinjecting six gpm. The four A zone extraction wells continue to pump at a combined rate of about 12 gpm.

The six month hydraulic control study originally due in August 1992 was delayed due to reinjection system failure as a result of calcium carbonate precipitation and system clogging. The study, rescheduled for completion in April 1993, was further delayed. Due to unresolvable problems with clogging, Honeywell, as owner of Synertek, submitted a request that the reinjection program and hydraulic control study be discontinued. Board staff has reviewed the request and sent a letter approving the request in the third quarter 1993.

FUTURE ACTIVITIES / TASKS:
Groundwater extraction and treatment continues as an integral part of the final remedial action at the site. Currently, approximately 26,000 gallons per day of groundwater is extracted and treated to remove volatile organic chemicals. Board staff will continue to monitor the site and review quarterly reports submitted by Honeywell.

TELEDYNE SEMICONDUCTOR, 1300 Terra Bella Ave., Mountain View; SPECTRA-PHYSICS INC., 1250 West Middlefield Road, Mountain View

CURRENT STATUS:
In February of 1991 the Board adopted a final Remedial Action Plan and EPA issued a record of decision. The RAP calls for groundwater extraction off-site and at the Teledyne facility. The RAP also requires additional soil treatment at the Spectra Physics facility.

During the third quarter, on-site work at Teledyne included the continuation of groundwater monitoring, effluent monitoring, extraction and treatment. On-site at Spectra-Physics, soil vapor extraction continued.

Spectra-Physics had a two year evaluation of their soil remediation system which resulted in additional source investigation and extension of the two year evaluation report deadline to March 1, 1994.

Off-site, Teledyne and Spectra-Physics monitor wells and extraction systems north and south of the Bayshore Freeway. Additional off-site groundwater extraction wells were installed in September 1992 in the northwest corner of the plume to remove contamination that, until May 1991, was removed by the City of Mountain View Landfill groundwater extraction system.

Teledyne and Spectra-Physics submitted a petition in February 1993 requesting their final Site Cleanup Requirements be revised to alter their responsibility in four North Bayshore source areas. This issue was brought before the Board at the March and the May 1993 meetings. At the May meeting, the Board directed staff to amend the 1991 Joint Order to include dischargers in the North Bayshore area. Board staff will investigate the North Bayshore sites further, and will amend the 1991 Joint Order to include an NBAR and/or dischargers in the North Bayshore area, contingent upon the findings of the investigation.

Off-site work includes investigation/remediation activities at Montwood, Santa Clara County Transportation Agency, and 1098 Alta Avenue. The Space Park Way site is the only site that requires initial investigation. The Regional Board is requiring the investigation and remediation at these sites.

In response to a request from the Board staff to clarify some critical issues, the owners of the Alta site submitted a report on September 30, 1993, which is under review by the Board staff.

Board staff have required no further investigation at the former Coastside Nursery property. Although VOCs were found in groundwater on the site, staff believe the contamination is coming from upgradient sources such as the Santa Clara County Transit Agency, Teledyne/Spectra-Physics, or currently unknown sources.

Quarterly ground water monitoring continues at the Santa Clara County Transportation Agency, North Coach Division, and ground water remediation began in October 1992. They discovered on August 19, 1993 that they had been discharging contaminated groundwater to the storm sewer because of the system being mistakenly connected to the storm drain rather than the sewer system. An ACL is being considered by the Board staff.

Initial Site Cleanup Requirements were issued in January 1993 to the previous owners of the former Montwood site. Montwood has been working on source investigation and interim remediation. Most of the investigation on-site and off-site is completed.

Owners/Occupants of the Space Park Way facilities were requested to define their past chemical usage. Water Board staff is reviewing the submittal, and upon completing the investigation will take appropriate actions.

Quarterly groundwater monitoring continues at Whisman School District.

FUTURE ACTIVITIES

Regional Board staff may use enforcement orders to provoke some investigation. The groundwater cleanup zone comprising the North Bayshore Extraction System will be reevaluated because of the installation of extraction wells in the northwest corner of the plume, the shut-down of the groundwater extraction trench at the City of Mountain View Landfill, and the significant rising of ground water levels. The landfill will be going through closure activities in the near future which may have some impact on off-site activities. A preventative maintenance program will begin for Teledyne/Spectra-Physics extraction wells/pumps. Water Board staff will be working with Teledyne and Spectra-Physics representatives to address apparent inequities outlined by their February 1993 petition. Water Board staff will also conduct further investigations for the Space Park Way facilities.

VAN WATERS & ROGERS, INC, 2256 Junction Avenue, San Jose

CURRENT STATUS:

On June 25, 1993, VW&R implemented a phased start up the vapor extraction system. The system has been in the start-up phase and should have reported results in December. Based on

reports from VW&R, breakthrough with the carbon for the system apparently must be monitored very carefully. Currently, the system is operational only when personnel are at the site. To date, VW&R has reported that the system was taken off-line on June 30, 1993 and started up again on October 5. They have not reported details on why the delay in start-up.

The expanded groundwater extraction system started up on July 19, 1993, and has been a phased inclusion of extraction wells to refine the capture zone. The system is reported as being fully operational, with some fine-tuning planned over the next few months. An evaluation of this system is also expected in December 1993. The A-aquifer extraction wells are 6, 11, 15, 16, 20, and 31, and the treatment system is an airstripper. The B-aquifer extraction wells are wells 20, 26, 29, 41, and 42, and uses carbon absorption.

The third quarter 1993 groundwater status report was received on November 1, 1993. Water table elevations in the A-aquifer increased from the previous quarter from less than .5 foot to 9.17 feet; this was observed mostly in extraction wells and in wells closest to the extraction wells. VW&R attribute this increase to decreases in flow rates of the extraction wells. In one extraction well the pump was malfunctioning, and in another it was not operating at the time of sampling. Water levels in B wells generally decreased approximately 1 foot. VOC concentrations did not change appreciably from the previous quarter.

Regarding the NPDES permit, VW&R has proposed an additional Influent sampling point (I-2) for the influent from the B wells, and deletion of sampling point A/S OUT, which was an effluent sampling point from a bioreactor no longer used for treatment. Regional Board staff will respond to their request, and will incorporate changes when their NPDES permit is re-issued. No violations of the NPDES permit were reported this quarter.

PROJECTED ACTIVITIES FOR NEXT SIX MONTHS:

Regional Board staff will schedule an inspection of the facility and groundwater treatment system during the quarter.

In December 1993 VW&R will submit an evaluation of the groundwater and in-situ vapor extraction systems.

No new tasks are required; groundwater monitoring continues.

US EPA and CAL/EPA – DTSC LEAD SITES:
(RWQCB is the support agency)

JASCO, Moutain View

CURRENT STATUS:
EPA issued the ROD for this site in September 1992; the cleanup plan calls for expanded groundwater extraction, treatment prior to POTW discharger, deed restriction prohibiting wells in shallow groundwater, and ex-situ bioremediation of soils. EPA issued an administrative order for Remedial Design/Remedial Action in December 1993.

During the last quarter, cleanup activities continued at this site, including interim groundwater extraction with POTW discharge. Jasco submitted a preliminary design for the approved cleanup plan in July. Jasco wants to try pilot-scale soil vapor extraction and air sparging of shallow groundwater, as a possible alternative to ex-situ bioremediation and groundwater extraction.

FUTURE ACTIVITIES / TASKS:
During the next six months, EPA staff will evaluate Jasco's proposal and consider approving the pilot-scale work. Jasco will submit a final design 3 months after EPA action.

LIQUID GOLD, 580 Fwy near Hoffman Marsh, Richmond, Contra Costa County

CURRENT STATUS:
This quarter's activities focused on the remedial design for the site. On June 18, 1993, Southern Pacific submitted a schedule of activities, and on August 9, 1993 submitted a preliminary remedial design (RD). On August 13, 1993 all interested agencies met with SP and their consultants to discuss the conceptual plan, and followed with a site walk to confirm the approach of the remediation.

The primary comments from Regional Board staff involved management of sediments during excavation of the upper channels. Southern Pacific was informed of the need for meeting substantive requirements of runoff control measures and dewatering during excavation and blending activities, and of obtaining a Stormwater Construction Permit.

The Draft Remedial Design with technical specifications for contractor bids was submitted to the agencies on October 12, 1993. When SP has selected contractor(s) for the work, Regional Board staff will review the specific approach for remediation.

The third quarter groundwater monitoring report was submitted September 24, 1993. Groundwater table elevations varied less than .5 foot this quarter. Analytical data indicated metals at similar concentrations as previous quarters, except in MW-7R which showed lead at 180 ppb, slightly above the mean for the previous four quarters. According to the long-term groundwater monitoring program, a statistical evaluation comparing onsite concentrations to background wells will be used to determine if changes in groundwater concentrations indicate an impact.

PROJECTED ACTIVITIES FOR NEXT SIX MONTHS:
The revised RD will be submitted in December 1993. Access agreements and securing contractors will occur during the winter and spring of 1994, providing for agency input in May - June 1994. Field work will begin July 1994.

LORENTZ BARREL AND DRUM, San Jose

The Record of Decision (ROD) for the shallow groundwater at the site was signed by the EPA in September 1988.

ACTIVITIES THIS QUARTER
The discharger submitted NPDES compliance monitoring and shallow groundwater monitoring reports during November. The site was in compliance with NPDES requirements except for dissolved oxygen. The low dissolved oxygen may be due to a chemical imbalance in the UV-peroxide treatment system. Subsequent testing has shown that the dissolved oxygen levels are back within regulatory limits.

REGULATORY EVENTS THIS QUARTER
None

PROJECTED EVENTS FOR NEXT QUARTER
Quarterly NPDES and groundwater monitoring reports will be submitted throughout the next year. the extraction rate for the remediation system is expected to increase by 20 percent during the fourth quarter.

UNRESOLVED ISSUES
Removal of impacted soils and sumps on the LBD property still needs to be addressed as required in the ROD.

MIDDLEFIELD-ELLIS-WHISMAN SITES, Mountain View

CURRENT STATUS:
EPA adopted a cleanup plan for the MEW area in June 1989. In mid-1991, EPA and two of the companies - Intel and Raytheon - signed a consent decree covering implementation of final cleanup activities; it received court approval in April 1992. EPA issued a unilateral enforcement order to Fairchild and other MEW dischargers in November 1990. Fairchild challenged EPA's ROD revision (which changed cleanup goals to standards) and other aspects of the negotiation process. A federal court dismissed the challenge, and Fairchild's appeal was dismissed in early 1993. Various responsible parties at the site are submitting RD/RA reports in response to the unilateral order or the consent decree.

During the last quarter, interim remediation continued at several MEW on-site areas. Sobrato and Spectrace submitted on-site remediation designs in September and October; this completes the on-site design submittals. The companies continued coordination efforts with the Navy over investigation and cleanup activities at Moffett Field (north of Highway 101). EPA conditionally approved a preliminary design for the regional remediation system (south of Highway 101) in August.

FUTURE ACTIVITIES:
During the next six months, the companies will continue RD/RA tasks. The final design for the remediation system (south of Highway 101) is due November 24. The final design for the system north of Highway 101 will follow once the MEW firms and the Navy agree on an allocation of system costs. Design of a reuse project will wait until individual and regional system designs are completed.

MOFFETT FIELD NAVAL AIR STATION, Mountain View / Sunnyvale (DOD FACILITY)

As of March 1, 1992, oversight responsibility for this site was transferred to another Regional Board division, which will be reporting through the Department of Defense federal facilities agreement (FFA). Moffett Field NAS is not part of the MSCA.

UNITED HECKATHORN (aka: LEVIN METALS), 402 Wright Avenue, Richmond, Contra Costa County

CURRENT STATUS:
The Marine Remedial Investigation, prepared by Batelle for US EPA, is expected to be submitted in early November. This report will focus on the refining the extent of sediment contamination in Lauritzen Canal and Santa Fe Channel.

PROJECTED ACTIVITIES FOR SIX MONTHS:
Regional Board staff will review and comment on the Marine RI Report. Staff did not have any major comments on the previously submitted Ecological Risk Assessment.

The Feasibility Study will be submitted as a separate report. Issues will focus primarily on remediation of contaminated sediments and applicable ARARs. Most of the upland areas were remediated as an interim remedial measure in 1991.

WESTINGHOUSE, Sunnyvale

CURRENT STATUS:
The Record of Decision for this EPA lead site was signed on October 16, 1991. EPA reached agreement with Westinghouse to start remedial design in February 1992.

EPA and Westinghouse have failed to reach agreement for a Consent Decree for final remedial action. Instead, EPA issued a unilateral order that compels Westinghouse to perform the full-scale cleanup plan currently in design. Based on the final remedial design workplan, design continued this quarter and remained on schedule, and will be completed in early 1994.

Shakedown of the pilot groundwater treatment and extraction system started December 30, 1992. Full operation of the pilot system started in the second quarter 1993 and continued during the third quarter. Initial system discharge is to the City of Sunnyvale's sanitary sewer. Full scale groundwater extraction and treatment is scheduled for mid-1994.

FUTURE ACTIVITIES:
Final remedial design will continue during the quarter. Westinghouse is evaluating whether design can be accelerated.

STATUS OF REGIONAL BOARD MSCA SUPPORT CONTRACTS

DATA VALIDATION (INTERAGENCY AGREEMENT W/CSDHS)

The data validation agreement calls for the California Department of Health Services (DHS) to conduct data validation on analytical data from selected ground water samples for eighteen Superfund sites. To date, DHS has reviewed 36 data validation packages from MSCA sites (most sites have undergone at least two rounds of data validation).

As the data validation agreement expired at the end of the first quarter 1992, Board staff, over the coming six months, will consider the need to extend the agreement.

BASELINE PUBLIC HEALTH EVALUATION CONTRACT (W/ICF CLEMENT)

The BPHE contract with ICF Clement expired in March 1993 and the Board can not renew it. It is not expected that the Board will seek another BPHE contract in this Phase.

TECHNICAL ASSISTANCE CONTRACT

The Regional Board is reconsidering whether to contract for technical assistance for the remainder of the MSCA due to the significant State overhead necessary to implement a contract, the value of the assistance gained, and the availability of qualified staff.

SUPERFUND LABORATORY CONTRACT

Pacific Environmental Laboratories (PEL) was the winning bidder for a Superfund Lab contract that runs from January 1, 1992 to June 30, 1993. The contract budget of $65,000 allows Board staff to submit split samples of ground water and soils to PEL as a check on PRP generated data.

Costs

Work on this MSCA task is budgeted by MSCA site. See the Table on page III-6 for overall grant budget status that includes Site Oversight.